
		NTSB ID: IAD02LA021		Aircraft Registration Number: N207TA	
		Occurrence Date: 12/20/2001		Most Critical Injury: None	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place Lewiston	State ME	Zip Code 04210	Local Time 2000	Time Zone EST	
Airport Proximity: On Airport		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Cessna		Model/Series 208B		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>On December 20, 2001, about 2000 eastern standard time, a Cessna 208B, N207TA, was substantially damaged during an aborted takeoff from the Auburn/Lewiston Municipal Airport (LEW), Lewiston, Maine. Teleford Aviation, Inc., doing business as United Parcel Service, operated the airplane. The certificated commercial pilot was not injured. Instrument meteorological conditions existed at the time, for the flight destined for Manchester Airport (MHT), Manchester, New Hampshire. An instrument flight rules flight plan was filed for the cargo flight, conducted under 14 CFR Part 135.</p> <p>According to the pilot, she arrived at the airport at 1915, and performed a preflight inspection of the airplane. Between 1928 and 1935, she loaded the airplane with cargo, then proceeded to remove snow from it by using a ladder and broom. The airplane was re-examined, and found free of any additional contamination. At 1955, the airplane taxied to the run-up area for a before takeoff check. All operational checks were normal and in accordance with limitations. At 1958, the pilot obtained her departure clearance, and was released for departure at 2000. At that time a second contamination check was conducted before she taxied slowly onto the runway due to unplowed conditions.</p> <p>Once on the runway, the pilot back-taxied the full length of runway 04 and used a 10-degree flap setting for departure. The brakes were held, and the throttle was advanced to maximum takeoff limits for final checks. The pilot began the takeoff roll and rotated the airplane when it reached 90 knots. The main wheels lifted off momentarily, then settled back onto the runway.</p> <p>The takeoff was aborted, the power lever was placed in the Beta/Reverse range, and the brakes were applied. The airplane slowed, but continued its slide down the center of the runway. The pilot secured the engine before the airplane overran the departure end of the runway. Once off the runway, right rudder was applied to avoid the localizer antenna. The airplane veered to the right and the left main tire caught anchor cables attached to the antenna. The airplane pivoted to the left, around the backside of the antenna, and came to rest.</p> <p>During a subsequent telephone interview, the pilot added that snow had fallen throughout the preflight inspection, loading, taxi, and takeoff. After she cleaned the snow from the airplane, the surfaces were clear, but remained wet as the snow continued to fall. Before takeoff, the procedure she used was to visually check the leading edges, the cowl, the windscreen, and the struts, which were all clear of contamination. The second contamination check was performed from the cockpit, just prior to taking the runway. Both the preflight and the before-takeoff checks were completed per the Cessna manual.</p> <p>There was about three-quarters of an inch of snow on the runway, and the company operations manual allowed an inch. When the pilot was asked if the runway had been plowed at any time prior to her departure, she answered that it had not been, and that, in fact, it was done after she went back to the terminal. According to the Auburn Fire Department, the runway had not been plowed when they</p>					
FACTUAL REPORT - AVIATION					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: IAD02LA021	
	Occurrence Date: 12/20/2001	
	Occurrence Type: Accident	

Narrative (Continued)

arrived on scene at 2018.

The pilot stated that she had flown for Teleford Aviation for about 1 year, and that this was her second winter season with the company. She recently completed a winter operations class and had received information from Cessna on the Caravan, as well as additional winter operations knowledge.

The pilot held a commercial pilot certificate with ratings for airplane single engine land, multi-engine land, and instrument airplane. Her most recent second-class medical certificate was issued February 5, 2001. The pilot reported that she had about 1,700 hours of flight experience, 700 hours of which were in the Caravan.

The pilot reported there were no mechanical anomalies with the airplane.

The weather reported at the airport at the time of the accident included a broken ceiling at 100 feet with an overcast layer at 800 feet. Visibility was 1 3/4 miles in light snow. The winds were from 360 degrees at 4 knots.


According to a meteorologist in the Auburn/Lewiston area, 5 inches of snow fell between 1400 on December 20, 2001, and 0700 on December 21, 2001. There was no weather observer at the Lewiston Airport to augment the AWOS system, and snow depth measurements were not available.


According to the Cessna Caravan Cold-Weather Operations Manual:


"No attempt should be made to take off with a load of ice or snow. Ice and snow on the wings will change the shape of the airfoil and disturb the flow of air over the wings, reducing available lift and airspeeds. Do not assume that light snow will melt or blow off during taxi-out or the takeoff run. Even if it does, it may reveal ice or frost beneath."

A review of the company operations manual by Teleford Aviation and the FAA after the accident resulted in new, more stringent de-ice requirements for the flight crews. Included in the new de-icing procedures was the mandatory use of de-icing fluid prior to taxi in freezing precipitation between plus 2 and minus 4 degrees Celsius.

Takeoff performance planning, as well as aborted takeoff criteria considerations for operation on contaminated runways were also added.

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: IAD02LA021			
		Occurrence Date: 12/20/2001			
		Occurrence Type: Accident			
Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
Auburn Lewiston Municipal Airp	LEW	288 Ft. MSL	04	5001	100
Runway Surface Type: Asphalt					
Runway Surface Condition: Snow--wet					
Type Instrument Approach: NONE					
VFR Approach/Landing: None					
Aircraft Information					
Aircraft Manufacturer	Model/Series		Serial Number		
Cessna	208B		0371		
Airworthiness Certificate(s): Normal					
Landing Gear Type: Tricycle					
Homebuilt Aircraft? No	Number of Seats: 2	Certified Max Gross Wt.	8950 LBS	Number of Engines: 1	
Engine Type:	Engine Manufacturer:	Model/Series:	Rated Power:		
Turbo Prop	Pratt & Whitney	PT6A-114A	675 HP		
- Aircraft Inspection Information					
Type of Last Inspection	Date of Last Inspection	Time Since Last Inspection	Airframe Total Time		
AAIP	11/05/2001	80.4 Hours	5234.5 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? Yes	ELT Operated? No	ELT Aided in Locating Accident Site? No			
Owner/Operator Information					
Registered Aircraft Owner	Street Address				
Teleford Aviation Inc	189 Odlin Road				
	City	State	Zip Code		
	Bangor	ME	04401		
Operator of Aircraft	Street Address				
Same as Reg'd Aircraft Owner	Same as Reg'd Aircraft Owner				
	City	State	Zip Code		
Operator Does Business As: UPS			Operator Designator Code:		
- Type of U.S. Certificate(s) Held:					
Air Carrier Operating Certificate(s): On-demand Air Taxi					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 135: Air Taxi & Commuter					
Type of Flight Operation Conducted:					
FACTUAL REPORT - AVIATION					

 National Transportation Safety Board FACTUAL REPORT AVIATION			NTSB ID: IAD02LA021																																																																																					
			Occurrence Date: 12/20/2001																																																																																					
			Occurrence Type: Accident																																																																																					
First Pilot Information																																																																																								
Name			City		State	Date of Birth		Age																																																																																
On File			On File		On File	On File		31																																																																																
Sex: F	Seat Occupied: Left		Principal Profession:			Certificate Number: On File																																																																																		
Certificate(s): Flight Instructor; Commercial																																																																																								
Airplane Rating(s): Multi-engine Land; Single-engine Land																																																																																								
Rotorcraft/Glider/LTA: None																																																																																								
Instrument Rating(s): Airplane																																																																																								
Instructor Rating(s): Airplane Single-engine; Instrument Airplane																																																																																								
Type Rating/Endorsement for Accident/Incident Aircraft? Yes					Current Biennial Flight Review? 11/08/2001																																																																																			
Medical Cert.: Class 2		Medical Cert. Status: Valid Medical--w/ waivers/lim.				Date of Last Medical Exam: 02/05/2001																																																																																		
<table border="1"> <tr> <th rowspan="2">- Flight Time Matrix</th> <th rowspan="2">All A/C</th> <th rowspan="2">This Make and Model</th> <th rowspan="2">Airplane Single Engine</th> <th rowspan="2">Airplane Multi-Engine</th> <th rowspan="2">Night</th> <th colspan="2">Instrument</th> <th rowspan="2">Rotorcraft</th> <th rowspan="2">Glider</th> <th rowspan="2">Lighter Than Air</th> </tr> <tr> <th>Actual</th> <th>Simulated</th> </tr> <tr> <td>Total Time</td> <td>2029</td> <td>749</td> <td>1954</td> <td>75</td> <td>658</td> <td>110</td> <td>55</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pilot In Command(PIC)</td> <td>1950</td> <td>749</td> <td></td> <td>70</td> <td>655</td> <td>110</td> <td>48</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Instructor</td> <td>1105</td> <td>2</td> <td>1105</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 90 Days</td> <td>126</td> <td>126</td> <td>126</td> <td></td> <td>71</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 30 Days</td> <td>67</td> <td>67</td> <td>67</td> <td></td> <td>11</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 24 Hours</td> <td>2</td> <td>2</td> <td>2</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>										- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air	Actual	Simulated	Total Time	2029	749	1954	75	658	110	55				Pilot In Command(PIC)	1950	749		70	655	110	48				Instructor	1105	2	1105								Last 90 Days	126	126	126		71						Last 30 Days	67	67	67		11						Last 24 Hours	2	2	2		1					
- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider							Lighter Than Air																																																																								
						Actual	Simulated																																																																																	
Total Time	2029	749	1954	75	658	110	55																																																																																	
Pilot In Command(PIC)	1950	749		70	655	110	48																																																																																	
Instructor	1105	2	1105																																																																																					
Last 90 Days	126	126	126		71																																																																																			
Last 30 Days	67	67	67		11																																																																																			
Last 24 Hours	2	2	2		1																																																																																			
Seatbelt Used? Yes		Shoulder Harness Used? Yes			Toxicology Performed? No			Second Pilot? No																																																																																
Flight Plan/Itinerary																																																																																								
Type of Flight Plan Filed: IFR																																																																																								
Departure Point		State			Airport Identifier		Departure Time		Time Zone																																																																															
Same as Accident/Incident Location					LEW		2000		EST																																																																															
Destination		State			Airport Identifier																																																																																			
Manchester		NH			MHT																																																																																			
Type of Clearance: IFR																																																																																								
Type of Airspace: Unknown																																																																																								
Weather Information																																																																																								
Source of Briefing: Unknown																																																																																								
Method of Briefing: Unknown																																																																																								

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: IAD02LA021			
		Occurrence Date: 12/20/2001			
		Occurrence Type: Accident			

Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
LEW	2055	EST	288 Ft. MSL	0 NM	Deg. Mag.
Sky/Lowest Cloud Condition:				Ft. AGL	Condition of Light: Night/Dark
Lowest Ceiling: Broken			100 Ft. AGL	Visibility: 1.75 SM	Altimeter: 29.54 "Hg
Temperature: 1 °C		Dew Point: -1 °C	Wind Direction: 360		Density Altitude: Ft.
Wind Speed: 4		Gusts:	Weather Conditions at Accident Site: Instrument Conditions		
Visibility (RVR): Ft.		Visibility (RVV) SM	Intensity of Precipitation: Moderate		
Restrictions to Visibility: None					
Type of Precipitation: Snow					

Accident Information					
Aircraft Damage:		Aircraft Fire:		Aircraft Explosion	
Classification:					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot				1	1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers					
- TOTAL ABOARD -				1	1
Other Ground					
- GRAND TOTAL -				1	1

FACTUAL REPORT - AVIATION		Page 4
---------------------------	--	--------



National Transportation Safety Board

FACTUAL REPORT
AVIATION

NTSB ID: IAD02LA021

Occurrence Date: 12/20/2001

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

Brian C. Rayner

Additional Persons Participating in This Accident/Incident Investigation:

James Edwards
FAA District Office/Coordinator
Portland, ME